

# Submission in Response to NSF CI 2030 Request for Information

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This contribution was submitted to the National Science Foundation as part of the NSF CI 2030 planning activity through an NSF Request for Information, [https://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf17031](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf17031). Consideration of this contribution in NSF's planning process and any NSF-provided public accessibility of this document does not constitute approval of the content by NSF or the US Government. The opinions and views expressed herein are those of the author(s) and do not necessarily reflect those of the NSF or the US Government. The content of this submission is protected by the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (<https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode>).

## Author Names & Affiliations

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(Hidden)

## Research Domain, discipline, and sub-discipline

Engineering, Mechanical Engineering, Combustion and Renewable Energy

## Title of Submission

Industry suggests that all San Diego Universities should produce more Big Data and Cybersecurity trained engineers

## Abstract (maximum ~200 words).

San Diego State University Engineering faculty often gets feedback from San Diego Industry during advisory board meetings, and visits to industry sites. San Diego has strong aerospace, tech, biotech and other industries and a common need that is asked of us as university educators is to produce more Big Data Engineers and Cybersecurity Engineers. To address this education need, perhaps the NSF could incorporate support for curriculum and course development in these areas of need.

**Question 1** Research Challenge(s) (maximum ~1200 words): Describe current or emerging science or engineering research challenge(s), providing context in terms of recent research activities and standing questions in the field.

Big Data Engineers and Cybersecurity Engineerings are highly sought by San Diego Industry.

**Question 2** Cyberinfrastructure Needed to Address the Research Challenge(s) (maximum ~1200 words): Describe any limitations or absence of existing cyberinfrastructure, and/or specific technical advancements in cyberinfrastructure (e.g. advanced computing, data infrastructure, software infrastructure, applications, networking, cybersecurity), that must be addressed to accomplish the identified research challenge(s).

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**Question 3** Other considerations (maximum ~1200 words, optional): Any other relevant aspects, such as organization, process, learning and workforce development, access, and sustainability, that need to be addressed; or any other issues that NSF should consider.

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## Consent Statement

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